

REMARKS

Claims 1-14 and 17-56 are pending in the present application. Claim 1 has been amended and claims 15-16 have been cancelled as a result of this Amendment. Claims 1, 52, and 53 are independent claims.

PRIORITY

The Examiner notes that a certified copy of the priority application DK PA 1999 00817 has not been filed. Applicants assert that certified copies of all nine (9) priority documents were sent to WIPO during the international phase of the present application, which is apparent from the Form IB 304 which was enclosed with Applicants' filing papers of 7 December 2001.

Applicants respectfully request the Examiner to acknowledge all of Applicants nine (9) priority claims. If the Examiner requires anything further in this regard, please contact the undersigned.

OBJECTION TO THE SPECIFICATION

Applicants have amended the specification to add the headings requested by the Examiner. Reconsideration and withdrawal of this objection is requested.

OBJECTION TO THE DRAWINGS

In reply to the drawing objections, Applicants submit corrected drawings, under separate cover, in a Letter to the Draftsperson. Approval of these corrected drawings and withdrawal of these objections are respectfully requested. In the alternative, Applicants respectfully request that these objections be held in abeyance until allowance of the application.

ALLOWABLE SUBJECT MATTER

Applicants acknowledge the Examiner's indication that claims 12-13, 16-18, 38-40, 43-44, 46-47, and 48-50 would be allowable if rewritten in independent form, including all of the features of the base claim and any intervening claims. Applicants direct the Examiner's attention to claim 1, which has been amended to incorporate the subject matter of claims 15 and 16, thereby placing claims 1-14 and 17-51 in condition for allowance.

35 USC § 102(B) ALTES REJECTION

Claims 1 and 19-22 have been rejected under 35 USC § 102(b) in view of US Patent 4,042,928 to Altes et al. (Altes et al.). This rejection is moot in light of the amendments to claim 1 to incorporate the allowable subject matter of dependent claim 16. Reconsideration and withdrawal of this rejection is requested.

35 USC § 103(A) ALTES/BARRETT REJECTION

Claims 2-6, 10, 14, 17, 19-24, 28-37, 39 and 51-52 have been rejected under 35 USC § 103(a) in view of Altes et al. and US Patent 5,486,833 to Barrett. With respect to claims 2-6, 10, 14, 17, 19-24, 28-37, 39 and 51, this rejection is moot in light of the amendments to claim 1 to incorporate the allowable subject matter of dependent claim 16. With respect to claim 52, this rejection is traversed for the following reason.

Applicants assert that neither Altes et al. nor Barrett teach or suggest the comparing step of claim 52, namely, "...comparing the transformed input signal with a predetermined set of original signals, each of said original signals being equal to one of said output signals of the

predetermined set of output signals being emitted and received noiselessly with a known channel gain and being transformed by means of said linear transform...”. Applicants respectfully assert that claim 52 is allowable for at least this reason. Reconsideration and withdrawal of this rejection is requested.

35 USC § 103(A) REJECTIONS OF ADDITIONAL CLAIMS WHICH DEPEND FROM

CLAIM 1

Claim 11 has been rejected under 35 USC § 103(a) in view of Altes et al. and US Patent 4,641,138 to Opitz; and claims 27, 41-42, and 45 have been rejected under 35 USC § 103(a) in view of Altes et al., Barrett, and US Patent 6,172,665 to Bullister . With respect to claims 11, 27, 41-42, and 45, this rejection is moot in light of the amendments to claim 1 to incorporate the allowable subject matter of dependent claim 16.

35 USC § 103(A) ALTES/KIM REJECTION

Claims 53-55 have been rejected under 35 USC § 103(a) in view of Altes et al. and US Patent 5,867,146 to Kim. This rejection is traversed for the following reason.

Independent claim 53 recites “...converting the determined channel gain(s) into a three dimensional position of an object, and for converting said three dimensional position into a position of the pointing device.” Applicants assert Altes et al. discloses a technique of characterizing the nature of a radiation path transfer function. The technique is particularly applicable to sonar or radar work for characterizing the shape of an object. However, the technique may also be used for compensating communication circuits and for parametrizing human speech. However, nothing in Altes et al. points one of ordinary skill in the art towards the

notion that the method disclosed therein may be used for creating a pointing device for a computer device. Furthermore, Altes et al. fails to disclose means for converting determined channel gain(s) into a three dimensional position of an object, and for converting said three dimensional position into a position of the pointing device, and nothing points a person of ordinary skill in the art in the direction that such means may be added to the device.

Applicants assert Kim et al. discloses a three dimensional wireless pointing device in which one or more emitters are built into a movable part of the pointing device and one or more receivers are positioned in or at an electronic appliance. The position of the emitter part may be determined and this position may be converted into the position of the pointing device. However, nothing in Kim et al. points a person of ordinary skill in the art towards the notion of determining one or more channel gain(s), and subsequently converting the determined channel gain(s) into a three dimensional position of an object and converting said three dimensional position into a position of the pointing device.

Thus, Applicants assert that a person of ordinary skill in the art would not combine Altes et al., relating to a method which is particularly useful for sonar or radar applications, with Kim, relating to a three dimensional pointing device for an electronic appliance, in order to obtain a pointing device, as defined in claim 53.

Furthermore, even if a person of ordinary skill in the art did combine Altes et al., and Kim (which Applicants assert they would not for the reasons set forth above), independent claim 53 would still not be rendered obvious since neither Altes et al., nor Kim et al. "...converting determined channel gain(s) into a three dimensional position of an object, and for converting said three dimensional position into a position of the pointing device.". As a result, Applicants assert independent claim 53 is allowable for at least this reason.

Applicants further assert dependent claims 54-55 are allowable by virtue of their dependency on independent claim 53, for at least the reasons set forth above.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-14 and 17-56 in connection with the present application is earnestly solicited.

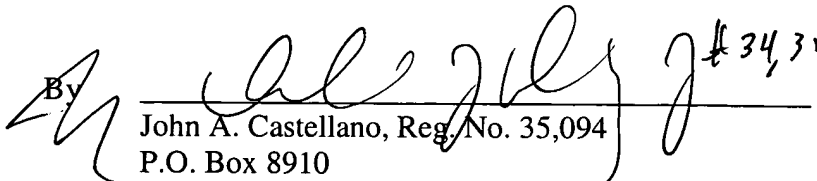
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a three (3) month extension of time for filing a reply to the outstanding Office Action and submit the required \$950.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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JAC/cah

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

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14 AUG. 2000

CLT/ABL

Date of mailing (day/month/year) 02 August 2000 (02.08.00)	
Applicant's or agent's file reference 24589 PC 1	IMPORTANT NOTIFICATION
International application No. PCT/DK00/00310	International filing date (day/month/year) 08 June 2000 (08.06.00)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 09 June 1999 (09.06.99)
Applicant BEAMCONTROL APS et al	

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk (*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority date	Priority application No.	Country or regional Office or PCT receiving Office	Date of receipt of priority document
09 June 1999 (09.06.99) ✓	PA 1999 00817 ✓	DK	12 July 2000 (12.07.00)
24 Sept 1999 (24.09.99) ✓	PA 1999 01368 ✓	DK	12 July 2000 (12.07.00)
20 Octo 1999 (20.10.99) ✓	PA 1999 01503 ✓	DK	12 July 2000 (12.07.00)
02 Dece 1999 (02.12.99) ✓	PA 1999 01720 ✓	DK	12 July 2000 (12.07.00)
09 Dece 1999 (09.12.99) ✓	PA 1999 01763 ✓	DK	12 July 2000 (12.07.00)
10 Dece 1999 (10.12.99) ✓	PA 1999 01777 ✓	DK	12 July 2000 (12.07.00)
18 Janu 2000 (18.01.00) ✓	PA 2000 00075 ✓	DK	12 July 2000 (12.07.00)
18 Janu 2000 (18.01.00) ✓	PA 2000 00087 ✓	DK	12 July 2000 (12.07.00)
22 Marc 2000 (22.03.00) ✓	PA 2000 00480 ✓	DK	12 July 2000 (12.07.00)

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Form PCT/IB/304 (July 1998)

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